

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 31 MAR 2005

WIPO

PCT

| | | |
|---|--|--------------------------------|
| Applicant's or agent's file reference 100700.0024P | FOR FURTHER ACTION | See Form PCT/IPEA/416 |
| International application No. PCT/US03/11950 | International filing date (day/month/year) 16 April 2003 (16.04.2003) | Priority date (day/month/year) |
| International Patent Classification (IPC) or national classification and IPC IPC(7): A23F 5/02, 5/16 and US Cl.: 426/595, 596, 433 | | |
| Applicant VDF FUTURECEUTICALS | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 2 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand

12 November 2004 (12.11.2004)

Date of completion of this report

15 March 2005 (15.03.2005)

Name and mailing address of the IPEA/ US

Mail Stop PCT, Attn: IPEA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Anthony Weier

Telephone No. 571-272-1700

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US03/11950

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ the international application as originally filed/furnished
- ☒ the description:
 - pages 1-15 as originally filed/furnished
 - pages* NONE received by this Authority on _____
 - pages* NONE received by this Authority on _____
- ☒ the claims:
 - pages NONE as originally filed/furnished
 - pages* 16 and 17 as amended (together with any statement) under Article 19
 - pages* NONE received by this Authority on _____
 - pages* NONE received by this Authority on _____
- ☐ the drawings:
 - pages NONE as originally filed/furnished
 - pages* NONE received by this Authority on _____
 - pages* NONE received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US03/11950

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|--------------------|-----|
| Novelty (N) | Claims <u>1-20</u> | YES |
| | Claims <u>NONE</u> | NO |
| Inventive Step (IS) | Claims <u>1-20</u> | YES |
| | Claims <u>NONE</u> | NO |
| Industrial Applicability (IA) | Claims <u>1-20</u> | YES |
| | Claims <u>NONE</u> | NO |

2. Citations and Explanations (Rule 70.7)

Claims 1-20 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a food product comprising coffee cherry with the amount of total aflatoxins, total ochratoxins and total fumonisins called for in the instant claims and a tea in view of the meaning derived from the specification wherein same is prepared from a comminuted quick-dried coffee cherry or portion thereof.

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus the food product and tea have industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US03/11950

Supplemental Box Relating to Sequence Listing

Continuation of Box No. I, item 2:

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion was established on the basis of:

a. type of material

☐

a sequence listing

☐

table(s) related to the sequence listing

b. format of material

☐

in written format

☐

in computer readable form

c. time of filing/furnishing

☐

contained in the international application as filed

☐

filed together with the international application in computer readable form

☐

furnished subsequently to this Authority for the purposes of search and/or examination

☐

received by this Authority as an amendment* on _____

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

* If item 4 in Box No. I applies, the listing and/or table(s) related thereto, which form part of the basis of the report, may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/US03/11950

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

What is claimed is:

1. A food product that comprises a preparation of a coffee cherry that is quick-dried such that a mycotoxin level of the coffee cherry is less than 20 ppb for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 ppm for total fumonisins.
2. The food product of claim 1 wherein the preparation of the coffee cherry comprises a ground fragment of the coffee cherry.
3. The food product of claim 2 wherein the preparation of the coffee cherry comprises an extract from a ground fragment of the coffee cherry.
4. The food product of claim 1 wherein the preparation of the coffee cherry comprises at least one of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of the coffee cherry, and a hull of the coffee cherry.
5. The food product of claim 1 wherein the preparation of the coffee cherry comprises an extract from at least one of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of the coffee cherry, and a hull of the coffee cherry.
6. The food product of claim 1 wherein the coffee cherry is a sub-ripe coffee cherry and has a primarily green color with less than 25% red color.
7. The food product of claim 1 wherein the coffee cherry is a sub-ripe coffee cherry and has a primarily red color with less than 25% green color.
8. The food product of claim 1 wherein the coffee cherry is a sub-ripe coffee cherry and has a primarily red color with less than 5% blemished area.
9. The food product of claim 1 wherein the coffee cherry is quick-dried in a dryer using heated air.
10. The food product of claim 1 wherein the coffee cherry is quick-dried in a dryer using solar radiation.
11. The food product of claim 1 wherein the coffee cherry is quick dried by exposing the coffee cherry to at least one of ambient air and sun light.

12. The food product of claim 1 wherein the food product is a tea brewed from the coffee cherry.
13. The food product of claim 1 wherein the food product is a beverage comprising an extract of the coffee cherry.
14. The food product of claim 1 wherein the food product is nutritional supplement in liquid or solid form and comprising an extract of the coffee cherry.
15. A tea that is brewed from a comminuted quick-dried coffee cherry or portion thereof.
16. The tea of claim 15 wherein the coffee cherry has a mycotoxin level of less than 20 ppb for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 ppm for total fumonisins.
17. The tea of claim 16 having a polyphenol concentration of at least 10 mg/oz.
18. The tea of claim 15 wherein the coffee cherry is a sub-ripe coffee cherry.
19. A quick-dried coffee cherry or portion thereof that has a mycotoxin level of less than 20 ppb for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 ppm for total fumonisins.
20. The quick-dried coffee cherry of claim 19 wherein the coffee cherry is a sub-ripe coffee cherry.